



Memorandum

To: Interested Party

From: Executive Committee, Middle Rio Grande Endangered Species Act Collaborative Program

Date: November 14, 2006

Subj: Invitation to Participate in a Status Update to the August 16-17 Workshop on Water Operations and Management in the Middle Rio Grande Workshop

When/Where: December 4 1-4pm at the US Army Corps of Engineers (4101 Jefferson Plaza, NE)

An invitational workshop was held August 16 and 17, 2006 in Albuquerque, New Mexico with the intent of engaging a diverse group of stakeholders in discussion of potential options for water operations and management in the Middle Rio Grande. Water operations and management in the MRG primarily consists of scheduling water deliveries for farmers/irrigators served by the Middle Rio Grande Conservancy District (including prior and paramount Native American rights), deliveries for the Rio Grande Project (Rio Grande Compact deliveries), San-Juan Chama contracts, and deliveries of water to meet target flows established by the U.S. Fish and Wildlife Service for purposes of the Endangered Species Act. Drought conditions, increasing demand for San-Juan Chama water, and the impacts of groundwater pumping on the river are resulting in decreased availability of supplemental water supplies needed to meet endangered species flow requirements. This has lead to a general concern that the 2003 Biological Opinion may not be sustainable over the 10-year period it strives for and that further long-range planning is necessary. In order to proactively address the situation in advance of a potential crisis we must move ahead in finding sustainable solutions.

Several concepts have been formulated over the past year by action agencies to try and assess the best possible options for meeting the needs of the species and protect water users. The Collaborative Program agreed to hold a facilitated workshop to begin a wider dialogue with the information currently at hand, acknowledging that further study would be necessary and to solicit any concepts stakeholders may wish to contribute. Workshop participants were presented with information on the current BO, an option of adding a critically dry year condition to the 2003 BO (Concept A), and a new operations proposal that uses coordinated water management to keep the river wet to San Acacia in most years and eliminating supplemental flows below San Acacia Diversion Dam (Concept B).

Modifications to these concepts and new options or concepts were brought forward during the discussion periods in the workshop. A commitment by the action agencies and the Collaborative Program was made to review these new concepts and to report back on any analysis of them. One such concept was termed "Concept C" during the workshop and envisioned adaptive management in any given year in response to hydrologic and biological conditions.

We would like to invite you to attend this follow-up meeting on **December 4 (1-4 pm)** to report back what the action agencies have done with the ideas generated from the Workshop and modeling results so far. Attached is a summary of the workshop.

Please contact Interim Program Manager, April Sanders at 505-342-3443 if you have any questions.

Sincerely,

Jennifer Gimbel
Federal Co-Chair
Dept. of Interior

Estevan Lopez
Non-Federal Co-Chair
Director, NMISC

Connie Rupp
Area Manager
Bureau of Reclamation

LTC Bruce Estok
District Engineer
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EXECUTIVE SUMMARY
AUGUST 16 AND 17, 2006 WORKSHOP
WATER OPERATIONS AND MANAGEMENT IN THE MIDDLE RIO GRANDE

An invitational workshop was held August 16 and 17, 2006 in Albuquerque, New Mexico for the purpose of engaging a wide diversity of stakeholders in discussion of potential options for water operations and management in the Middle Rio Grande (MRG). The workshop was facilitated by Strategy Works, Inc. for the Middle Rio Grande Endangered Species Collaborative Program (Program).

Water operations and management in the MRG primarily consists of scheduling water deliveries for farmers/irrigators served by the Middle Rio Grande Conservancy District (including prior and paramount Native American rights), deliveries for the Rio Grande Project (Rio Grande Compact deliveries), San Juan-Chama contracts, and deliveries of water to meet target flows established in the 2003 Biological Opinion (2003 BO) by the U.S. Fish and Wildlife Service. Drought conditions, increasing demand for San-Juan Chama water, and the impacts of groundwater pumping on the river are resulting in decreased availability of water needed to meet these competing demands. This has lead to a general concern that the 2003 BO may not be sustainable over the 10-year period it strives for and that further long-range planning is necessary.

Several concepts have been formulated over the past year by action agencies to assess the possible options for meeting the requirements of species and water users. The Program agreed to hold a facilitated workshop to begin a wider dialogue with the information currently at hand, acknowledging that further study would be necessary and to solicit any concepts stakeholders may wish to contribute. Workshop participants were presented with information on the current BO, an option of adding a “critically dry year” condition to the 2003 BO (Concept A), and a new operations concept that uses coordinated water management to keep the river wet to San Acacia in most years and eliminates supplemental flows below San Acacia Diversion Dam (Concept B).

The participants were asked to react to and/or modify existing concepts, and present their ideas for MRG water operations through a series of facilitated breakout sessions that encouraged brainstorming and individual expression. The Program received the recorded comments and distributed them to workshop participants for review for accuracy and to provide any additional ideas or reactions generated since the workshop.

A list of reactions and discussions on Concept A, “Critically Dry Year” addition to the 2003 BO: and Concept B, termed “Upstream Reach” follows this summary. Modifications to these concepts as well as new options or concepts were brought forward by participants during the workshop. A commitment by the action agencies and the Program was made to review these new concepts and to report back on any analysis of them. One such concept was termed “Concept C” during the workshop and envisioned adaptive management in any given year in response to hydrologic and biological conditions. This and the other ideas and concepts provided by participants are listed included in this summary.

In summary, the workshop was very well attended and the Collaborative Program is grateful to all the participants for taking time out of their busy schedule for this event. A follow-up workshop will be scheduled before the end of the calendar year 2006.

CONCEPTS A AND B

Leann Towne (Reclamation) on Concept A and Rolf Schmidt-Petersen (New Mexico Interstate Stream Commission) on Concept B presented at the workshop the current alternative concepts to the 2003 BO flow requirements. The current requirements and the two concepts presented were:

2003 Biological Opinion Flow Requirements

- 1) Flow Targets vary if the US Fish and Wildlife determine current year is:
 - a. Wet Year
 - b. Average Year
 - c. Dry Year
- 2) Year determination based on April/May “most probable” snowmelt runoff forecast at Otowi Gage or Article VI and/or VII of Rio Grande Compact in Dry Year.
- 3) Albuquerque Reach must be kept wet all year every year.
- 4) Rio Grande from Cochiti Dam to Elephant Butte headwaters must be kept wet through spawning period for the Silvery Minnow.
- 5) Reaches south of Isleta Diversion Dam must be kept wet after the spawn based on snowmelt runoff volume.

Concept A: Addition of “Critically Dry Year” Flow Targets to the 2003 BO

Maintain current 2003 Biological Opinion Flow Requirements and add a Critically Dry Year Concept. This concept would require amending the BO.

This approach would amend/supplement the 2003 Biological Opinion. *Exact criteria or triggers for flow year determination and specific flow targets still under development.*

The hydrologic year could be determined by snowmelt forecasts at Otowi as well as water available in storage and ability to store.

- 1) Flow Targets vary if US Fish and Wildlife determine current year is:
 - a. Wet Year
 - b. Average Year
 - c. Dry Year
 - d. Critically Dry Year
- 2) Year determination based on critically low April/May “most probably” snowmelt runoff forecasts at Otowi Gage, water available in storage, and ability to store.
- 3) Albuquerque Reach kept wet all year every year.
- 4) Cochiti Dam to Isleta Diversion Dam wet through spawning period for the Silvery Minnow.
- 5) Reaches south of Isleta Diversion Dam are NOT required to be kept wet after the spawn based on snowmelt runoff volume.
- 6) Stored water will be released for managed recession but NOT to keep the river wet below Isleta Diversion Dam.
- 7) Areas in the Isleta and San Acacia Reaches remain wet with Middle Rio Grande Project outfalls and Low Flow Conveyance Channel Pumping.

Concept B: Upstream Reach Concept

WATER OPERATIONS AND MANAGEMENT IN THE MIDDLE RIO GRANDE

Flow year determinations differ from 2003 Biological Opinion. *Exact criteria or triggers for flow year determination and specific flow targets still under development.* A new BO would be required.

- 1) Flow Targets vary if US Fish and Wildlife determine current year is:
 - a. Wet Year
 - b. Average Year
 - c. Dry Year
 - d. Critically Dry Year – Severe Drought
 - e. Extraordinary Drought
- 2) Year determination based on April/May “most probably” snowmelt runoff forecasts at Otowi Gage, water available in storage, and ability to store.
- 3) Albuquerque reach wet all year every year.
- 4) Cochiti Dam to San Acacia Diversion Dam kept wet through spawning period for the silvery minnow.
- 5) Reaches south of Isleta Diversion Dam wet after the spawn based on snowmelt runoff volume, water available in storage, and ability to store.
- 6) Stored water NOT released to keep the river wet below San Acacia Diversion dam and is stored water saved for use in critically dry times
- 7) Areas in the Isleta and San Acacia Reaches remain wet with Middle Rio Grande Project outfalls and Low Flow Conveyance Channel Pumping.

Workshop Participants General Reactions

- The presenters attempted to provide an apples-to-apples comparison; participants seemed to lack understanding of differences between concepts.
- Neither concept A or B was perceived as providing a long-term solution – sustainability and storage options missing, for example.
- Prime habitat for minnow and flycatcher would be impaired by lack of water, particularly in San Acacia.
- Interaction of the Low Flow Conveyance Channel was not described.
- Habitat restoration projects (e.g., Los Lunas and Santa Ana) could be affected in either concept.
- Specific flows were not identified making habitat quality hard to determine.
- Sources for water supply were not clearly identified or certain to be secured.

WATER OPERATIONS AND MANAGEMENT IN THE MIDDLE RIO GRANDE

Specific Comments on Concept A

- + Recognizes lack of water
- + Preserves 2003 BO
- + Easy to implement
- Doesn't address recovery plan
- Doesn't solve boom or bust scenario
- Does not build in flexibility
- Doesn't reflect learning about the fish

Specific Comments on Concept B

- + Helps species in a drought situation
- + Attempts to smooth out boom and bust
- + Supports traditional uses for Isleta
- + Spawning release helpful
- Requires a new BO
- Evap. losses in Isleta not addressed
- Exacerbates negative impact downstream
- Places responsibility on farmers and MRGCD
- Best habitat is abandoned; worst is kept

Note: The ESA Collaborative Program is considering these tools but does not yet endorse their implementation.

- Specific ideas generated from Workshop Participants -

Water Management Tools for any scenario:

- Reservoir flexibility/re-regulation to allow for additional storage options including looking at carryover, Indian water rights, Cochiti flexibility.
- Pursue changes to State law regarding stormwater management, stop tax incentives for non-Ag irrigation; change building codes to ensure conservation measures.
- Developers need to be accountable and provide water for ecosystem in a way that provides supplemental water.
- Storage through voluntary fallow/leasing combined with agricultural efficiencies.
- Consider working with Texas on Compact restrictions (Article VII) to allow storage upstream.
- Adjudication on the MRG or AWRMs.

Other Operational Ideas included:

- Develop short-term strategy with long-term solutions to be evaluated and assessed.
- Construct BO with baseline requirement to meet minimum criteria with active management each year to optimize benefits for all user communities – (Concept C).
- Keep river wet through Los Lunas restoration project year round.